

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re Applicant: Alan B. Shuey

Serial No. 10/029,087

Confirmation No. 3407

Filed: December 20, 2001

Group Art Unit: 3677

Examiner: Ruth C. Rodriguez

Supervisory Patent Examiner: J. J. Swann

Assignee: Ductmate Industries, Inc.

Title of Invention:

Releasable Cable Grip

Attorney Docket No. 010071

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April 16, 2004

BRIEF ON APPEAL
37 CFR 1.192

1. REAL PARTY IN INTEREST

The real party in interest is the Assignee, Ductmate Industries, Inc., a Pennsylvania corporation.

2. RELATED APPEALS

There are no related appeals.

3. STATUS OF CLAIMS

This application, originally as filed, contained eighteen (18) claims. In response to a

December 23, 2002 Office Action, Applicant filed an Amendment on March 4, 2003 canceling

December 23, 2002 Office Action, Applicant filed an Amendment on March 4, 2003 canceling claims 1-13 and amending claim 14 and adding claim 19. A Final Office Action dated May 5, 2003 issued and indicated that claims 14-19 were rejected and that claim 19 was objected to as being based on a rejected claim and if it were rewritten in independent form it would have been allowable. Applicant filed an Amendment in response to the May 5, 2003 Final Office Action canceling claims 1-18, amending claim 19 to be written in independent format, and adding dependent claims 20 and 21. On June 3, 2003 a Non-final Office Action issued removing the finality of the May 5, 2003 Office Action. The June 3, 2003 Non-final Office Action rejected claims 19-21. In response to the June 3, 2003 Non-final Office Action, Applicant filed an Amendment on August 28, 2003 canceling claim 19, amending claims 20 and 21 and adding claims 22 and 23. In a November 25, 2003 Final Office Action claims 20-23 were rejected and the rejection was made final. In the November 25, 2003 Office Action the Examiner objected to claim 22. Applicant is filing simultaneously with this Brief an Amendment of Claim 22 to place it in better form for consideration on Appeal. The claims on appeal are claims 20-23. These claims appear in the Appendix attached to this Brief.

4. STATUS OF AMENDMENTS

Applicant is filing, simultaneously with this Brief, an Amendment of Claim 22 to place it in better form for consideration on Appeal. This Amendment has not been acted upon by the Examiner.

5. SUMMARY OF INVENTION

This invention relates to a releasable cable grip connector for locking a cable segment within a housing and for having a second cable segment pass through the housing. (Specification p. 2, para. 0004, Ls. 1-2). A housing having a first bore through it receives a first cable segment and a second bore through the housing parallel to the first bore receives a second cable segment. (Specification p. 2, para. 0004, Ls. 2-4). A channel within the body disposed to one side of the first bore and acutely inclined to it, at its inner end, breaks into the first bore. (Specification p. 2, para. 0004, Ls. 4-6). A wedge is positioned within the housing in the channel and is spring loaded to bias the wedge against the cable segment within the first bore to wedge the cable segment against the first bore and thereby grip the cable segment. (Specification p. 2, para. 0004, Ls. 6-8). A slot in the housing extends parallel to the channel and communicates with the channel. (Specification p. 2, para. 0004, Ls. 8-9). A release lever fixed to the wedge extends through the slot to the outside of the housing whereby the release lever may be utilized to move the wedge away from the cable segment and permit movement of the cable segment relative to the first bore. (Specification p. 2, para. 0004, Ls. 9-13).

Claim 22

A releasable cable grip 10 (p. 4, para. 0017, L. 1); 30 (p. 5, para. 0020, Ls. 1-2) connector

for locking a cable segment 26 (p. 4, para. 0017, Ls. 4-5; Fig. 4) within a housing 12 (p. 4, para. 0017, L. 2) comprising:

a housing 12 (p. 4, para. 0017, L. 2; Figs. 1-6) and 30 (p. 5, para. 0020, L. 2; Figs. 7-8) having a first bore 14 (p. 4, para. 0017, L. 2; Figs. 1-6) and 34 (p. 5, para. 0020, Ls. 2-3; Figs. 7-8) therethrough to receive a first cable 26 (p. 4, para. 0017, Ls. 5-11; Fig. 4) segment and a second bore 14, 14a (p. 4, para. 0017, L. 2; Figs. 1-6) and 34 (p. 5, para. 0020, Ls. 2-3; Figs. 7-8) therethrough parallel to said first bore 14 and 34 to receive a second cable segment, said first and second bores 14 and 34 being of a diameter to permit said first and second cable segments to pass freely through said bores 14 and 34, said first and second bores 14 and 34 being straight throughout the extent of said housing (Figs. 1-7);

a channel (p. 5, para. 0018, L. 6; Fig. 5) within said housing 12 and 30 disposed to one side of said first bore 14 and 34 and acutely inclined to and, at its inner end, breaking into said first bore (p. 5, para. 0018, Ls. 1-6; Fig. 5); wedge means 20 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 40 (p. 5, para. 0020, Ls. 4-5; Figs. 7-8) positioned within said housing 12 (p. 4, para. 0017, L. 2; Figs. 1-6) and 30 (p. 5, para. 0020, L. 2; Figs. 7-8) in said channel and spring loaded by a coil spring 22 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 42 (p. 5, para. 0020, L. 4; Figs. 7-8) to bias said wedge means 20 (p. 4,

para. 0017, Ls. 3-8; Figs. 1-6) and 40 (p. 5, para. 0020, Ls. 4-5; Figs. 7-8) against said cable segment 26 (p. 4, para. 0017, Ls. 4-5; Fig. 4) within said first bore 14 (p. 4, para. 0017, L. 2; Figs. 1-6) and 34 (p. 5, para. 0020, Ls. 2-3; Figs. 7-8) to wedge said cable segment 26 (p. 4, para. 0017, Ls. 4-5; Fig. 4) against said first bore 14 (p. 4, para. 0017, L. 2; Figs. 1-6) and 34 (p. 5, para. 0020, Ls. 2-3; Figs. 7-8) and thereby grip said cable segment 26 (p. 4, para. 0017, Ls. 4-5; Fig. 4), said coil spring 22 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 42 (p. 5, para. 0020, L. 4; Figs. 7-8) that spring loads said wedge means 20 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 40 (p. 5, para. 0020, Ls. 4-5; Figs. 7-8) being positioned axially within said channel so that the force generated by said coil spring 22 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 42 (p. 5, para. 0020, L. 4; Figs. 7-8) acts at all times in an axial direction;

a slot 18 (p. 4, para. 0017, L. 2; Figs. 1-8) in said housing 12 (p. 4, para. 0017, L. 2; Figs. 1-6) and 30 (p. 5, para. 0020, L. 2; Figs. 7-8) extending parallel to said channel and to said coil spring 22 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 42 (p. 5, para. 0020, L. 4; Figs. 7-8) within said channel and communicating with said channel;

a release lever 16 (p. 4, para. 0017, L. 2; Figs. 1-8) fixed to said wedge means 20 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 40 (p. 5, para. 0020, Ls. 4-5; Figs.

7-8) and extending through said slot 18 (p. 4, para. 0017, L. 2; Figs. 1-8) to the outside of said housing 12 (p. 4, para. 0017, L. 2; Figs. 1-6) and 30 (p. 5, para. 0020, L. 2; Figs. 7-8) whereby said release lever 16 (p. 4, para. 0017, L. 2; Figs. 1-8) may be utilized to move said wedge means 20 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 40 (p. 5, para. 0020, Ls. 4-5; Figs. 7-8) against the force of said coil spring 22 (p. 4, para. 0017, Ls. 3-8; Figs. 1-6) and 42 (p. 5, para. 0020, L. 4; Figs. 7-8) away from said cable segment 26 (p. 4, para. 0017, Ls. 4-5; Fig. 4) and permit movement of said cable segment 26 (p. 4, para. 0017, Ls. 4-5; Fig. 4) relative to said first bore 14 (p. 4, para. 0017, L. 2; Figs. 1-6) and 34 (p. 5, para. 0020, Ls. 2-3; Figs. 7-8).

6. ISSUES

Claims 20-23 were rejected. The rejection was made final. The rejection was based on the Examiner's contention that claims 20-22 (Applicant believes that the Examiner intended to include claim 23 in the statement of the rejection because the limitations of claim 23 are included in the Examiner's discussion) are obvious under 35 U.S.C. § 103(a) and are obvious over Facey et al. (US 6,003,210) in view of Pasbrig (US 4,889,320).

The issue is whether the Examiner erred as a matter of law in finding the rejected claims obvious in view of the references cited by the Examiner.

7. GROUPING OF CLAIMS

Claims 20-23 stand or fall together with respect to the 35 U.S.C. § 103(a) rejection as being obvious over Facey et al. (US 6,003,210) in view of Pasbrig (US 4,889,320).

8. ARGUMENT §1.192 (c)(iv)

Examiner's Objection

The Examiner objected to claim 22 because there was insufficient antecedent basis for "said core spring" in line 16 and "said wedge" between lines 14 and 15.

"Said core spring" was a typographical error and was amended to "said coil spring."

"Said wedge" was a typographical error and was amended to "said wedge means."

An Amendment is being filed simultaneously with this brief that should remove this issue.

Examiner's contention that claims 20-23 are obvious under 35 U.S.C. § 103(a)

The Examiner has rejected claims 20-23 under 35 U.S.C. § 103(a) as being unpatentable over Facey et al. (US 6,003,210) in view of Pasbrig (US 4,889,320).

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the

knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP 2143.

The Examiner has failed to show a *prima facie* case of obviousness because she has not shown suggestion or motivation to modify or combine the reference teachings.

“The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” *In re Fritch*, 972 F.2d 126, 1266 (Fed. Cir. 1260) (emphasis added).

U.S. Patent No. 6,003,210 to Facey et al. (‘210) discloses a releasable cable grip connector that locks a cable within a housing. The Examiner has admitted that ‘210 “fails to disclose using a release lever extending through a slot in the body to release the cable grip” as required by Applicant’s claim 22. (November 25, 2003 Office Action p. 3 Ls. 14-15). ‘210 discloses utilizing a tool 35 to free the cable (C. 3, Ls. 28-29, Fig.9). There are apertures 34A and 34B within the front of the housing 27 that allow for insertion of the tool 35 (C. 3, Ls. 28-29, Fig.8). ‘210 is directed to a kit for suspending objects. ‘210 indicates a preference for providing a tool with the kit to release or withdraw either of the wedging means (C. 2, Ls. 32-33).

U.S. Patent No. 4,889,320 to Pasbrig ('320) discloses an apparatus for detachably clamping, tensioning, and securing ropes, cables, wires, belts or the like. '320 discloses a cable grip connector having a release lever 6 and 6", 9 and 9" and a housing with a bore a channel and a slot 27.

Neither '210 nor '320 suggest the desirability of replacing the release tool in '210 with the release lever and slot shown in '320. The only suggestion is Applicant's invention. The Examiner is improperly using hindsight to combine the teachings. "[A]n examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention." *In re Rouffett*, 149 F.3d 1350, 1357 (Fed Cir. 1998).

'210 teaches away from the combination, "the kit is preferably provided with a tool for releasing or withdrawing either of the wedging means." (C. 2, Ls. 32-33). Applicant acknowledges that this preference could be directed toward providing a tool with the kit instead of a preference for a use of a tool. However, the structure of '210 is one in which the special apertures 34A and 34B at the inlet ends of the device are provided only for the use of the tool and serve no other purpose, leading to a conclusion that there is a preference for the use of a tool.

Additionally, if '210 were to use a release lever, a slot would have to be cut into the housing of '210. If this is done then the apertures 34A and 34B of '210 become useless.

The Examiner incorrectly argues that the motivation to combine the references is found in '320. "[T]he motivation to combine the references by Facey and Pasbrig is found in the Pasbrig reference at column 2, lines 11-13 that recites that 'The axial projections mounted directly on the clamping unit transmit the force employed for unclamping directly to the clamping unit'." (November 25, 2003 Office Action p. 6, Ls. 2-4). The Examiner is improperly implying that this sentence in '320 suggests a desirability of replacing the tool in '210 with the release lever in '320. This sentence actually suggests the use of direct mounting over indirect mounting because direct mounting directly transmits the force.

The "clamping unit" referred to in '320 is what Applicant refers to as the "wedge means" and "the axial projections" referred to in '320 is what Applicant refers to as "release levers." In the background of the invention '320 discusses prior art that indirectly mounts the release lever to the wedge means. When referring to German Patent No. 1,266,384, '320 states "[a] lever projection through the sleeve serves for operation of the clamping unit. The lever consists of angled wire section which engages a backward projection of the clamping unit (emphasis added)." (C. 1, Ls. 24-25). Figure 3 of German Patent No. 1,266,384, which is attached and marked as Exhibit A, is an example of indirect attachment. Exhibit A shows the release lever attached to an intermediate member which is attached to the wedge means.

'320 suggests that it is desirable to mount the release levers (or axial projections) **directly** on the wedge means (or clamping unit) because the release levers (or axial projections) will transmit the unclamping force **directly** to the wedge means. (C.2, Ls. 11-13). The direct mounting is desirable over mounting the release levers (axial projections) **indirectly** (through the use of intermediate members) to the wedge means (or clamping unit).

The following sentence in '320 illustrates this point "[b]y **dispensing with intermediate members**, the clamping apparatus is also simplified and is thus more reliable and less susceptible to problems." (emphasis added) (C.3, Ls. 14-16). The previous quote appears in '320 as the sentence after, "The axial projections mounted directly on the clamping unit transmit the force employed for unclamping directly to the clamping unit." which the Examiner relies on for showing a desirability of using release levers instead of the tool in '210. It is clear that '320 suggests using direct mounting of axial members instead of indirect mounting of axial members, not direct mounting over the use of a separate tool.

This point is further illustrated by the fact that, the tool in '210 transmits the force employed for unclamping **directly** to the wedge means. '320 indicates that directly mounting the release lever to the wedge means is desirable because the release levers "transmit the force employed for unclamping directly to clamping unit." (C.2, Ls. 11-13). Therefore, '320 does not suggest any reason as to why it would be desirable to use direct mounted release levers over the tool in '210 because they both transmit the force for unclamping directly to the wedge means.

Motivation to combine requires desirability not merely a trade-off. At best a trade-off is suggested. "Trade-offs often concern what is feasible, not what is necessarily desirable.

Motivation to combine requires the latter." *Winner International Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 (Fed Cir.), cert. denied, 530 U.S. 1238 (2000).

The Examiner also suggests additional motivation for the combination of the references by "pointing out the release of the wedge means is also simplified because a separate tool that could become lost is not required for the release of the wedge because a release lever connected to the wedge means is integrally connected to the housing thereby allowing adjustment." (November 25, 2003 Office Action p. 6, Ls. 7-10). The Examiner's suggestion is that the convenience of the release lever is a motivating factor for the combination. However, a benefit of the separate tool is that it adds security because it is not possible to accidentally release the wedge means and only the person with the tool can release the wedge means. Because the release lever is always accessible it is possible that the wedge means could be accidentally released. Additionally, an always accessible release lever can be released by anybody, not just the person with the tool. The security benefit should be considered when making the determination of whether convenience is motivating. *Winner*, 202 F. 3d at 1349 n.8.

In *Winner International Royalty Corp. v. Wang*, the Federal Circuit affirmed a decision of a district court finding that one of ordinary skill in the art would not reasonably elect trading the benefit of security for that of convenience. *Id.* at 1349.

U.S. Patent No. 4,935,047 to Wu ('047) at issue in *Winner*, contained claims directed toward an automotive antitheft device that used a ratcheting device to lock the device to a car's steering wheel. *Id.* at 1342-43. U.S. Patent No. 4,738,127 to Johnson ('127) disclosed virtually all aspects of the invention claimed in '047 except a ratcheting mechanism used to lock the device on the wheel. *Id.* at 1349. '127 used a dead-bolt to lock the device in place which required the user to turn a key after putting the device on the wheel. *Id.* at 1344. U.S. Patent No. 3,462,982 to Moore ('982) disclosed a steering wheel lock that utilizes a self locking ratcheting mechanism. *Winner*, 202 F. 3d at 1344. Taiwan Patent App. No. 74,210,699 to WuROC ("WUROC") disclosed a wheel and brake pedal locking device with a versatile locking core that can accommodate either a dead-bolt or a self-locking ratcheting mechanism. *Id.*

Wang, the defendant/appellant in *Winner International Royalty Corp. v. Wang*, argued to the United States Patent and Trademark Office Board of Patent Appeals and Interferences ("Board") in an interference proceeding that '047 was obvious over '127, '982 and WUROC. *Id.* at 1343.

At issues was whether or not there was a motivation to combine the references. *Id.* at 1344. "The Board had found that one skilled in the art (1) 'would have considered Johnson's dead-bolt-type locking device to be disadvantageous compared to the Moore and WuROC devices to the extent that Johnson requires a key for setting in position and adjusting the device,' and (2) 'would have been motivated to make Johnson easier to use, albeit less secure, by

replacing the dead-bolt mechanism' of Johnson with a suitable self-locking ratcheting mechanism (citations omitted). *Id.* On appeal the District Court for the District of Columbia found that these factual findings were "clearly erroneous" and found that adequate motivation to combine the references was not shown. *Winner*, 202 F. 3d at 1344.

The Federal Circuit affirmed the district court's decision with respect to the motivation to combine issue, "although there was conflicting evidence before the district court on whether one would see the trade-off between using a dead-bolt and using a ratcheting mechanism and conclude that the more secure dead-bolt should be replaced with the more convenient ratcheting mechanism, the district court did not clearly err in finding that one of ordinary skill in the art would not have reasonably elected trading the benefit of security for that of convenience. Trade-offs often concern what is feasible, not what is, on balance, desirable. Motivation to combine requires the latter." *Id.* at 1349.

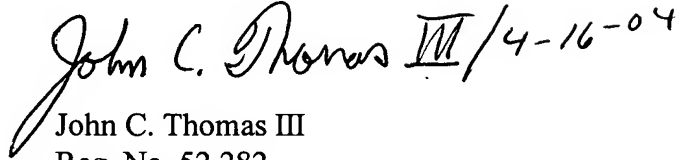
One of ordinary skill in the art would not trade the convenience of the release lever in '320 over security of the tool '210, therefore convenience is not a motivating factor or suggestion to combine the '320 release lever with the '210 releasable cable grip connector. The Examiner has failed to set forth a *prima facie* case of obviousness because the Examiner has not shown a suggestion or motivation to combine the art.

Appl. No. 10/029,087
Brief on Appeal date April 16, 2004
Express Mail No. EL978300736US

9. CONCLUSION

The Examiner's rejections under 35 U.S.C. §103 (a) should be reversed.

Respectfully submitted,


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APPENDIX
CLAIMS APPEALED (20-23)

Claim 20: The releasable cable grip connector of claim 22 wherein said wedge means has a release lever extending outwardly on each side of said wedge means through respective slots on opposite sides of said housing.

Claim 21: The releasable cable grip connector of claim 22 wherein said wedge means has a single release lever extending outwardly on said wedge means through said slot and said housing.

Claim 22: A releasable cable grip connector for locking a cable segment within a housing comprising:

a housing having a first bore therethrough to receive a first cable segment
and a second bore therethrough parallel to said first bore to receive
a second cable segment, said first and second bores being of a
diameter to permit said first and second cable segments to pass
freely through said bores, said first and second bores being straight
throughout the extent of said housing;

a channel within said housing disposed to one side of said first bore and acutely

inclined to and, at its inner end, breaking into said first bore;

wedge means positioned within said housing in said channel and spring loaded by a coil spring to bias said wedge means against said cable segment within said first bore to wedge said cable segment against said first bore and thereby grip said cable segment, said coil spring that spring loads said wedge means being positioned axially within said channel so that the force generated by said coil spring acts at all times in an axial direction;

a slot in said housing extending parallel to said channel and to said coil spring within said channel and communicating with said channel;

a release lever fixed to said wedge means and extending through said slot to the outside of said housing whereby said release lever may be utilized to move said wedge means against the force of said coil spring away from said cable segment and permit movement of said cable segment relative to said first bore.

Claim 23 (previously presented): The releasable cable grip connector of claim 22 wherein said second bore within said housing permits said second cable segment to move freely within said second bore.

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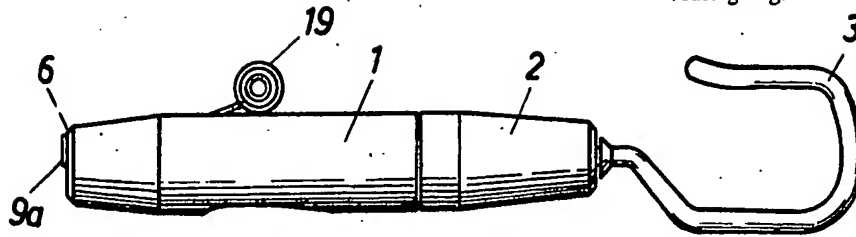


FIG. 1

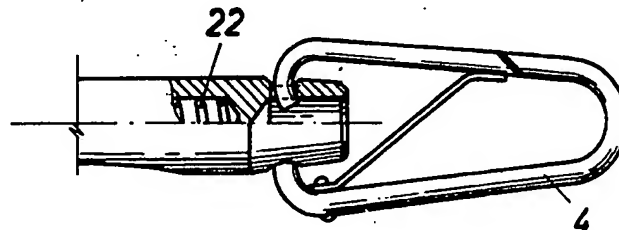


FIG. 2

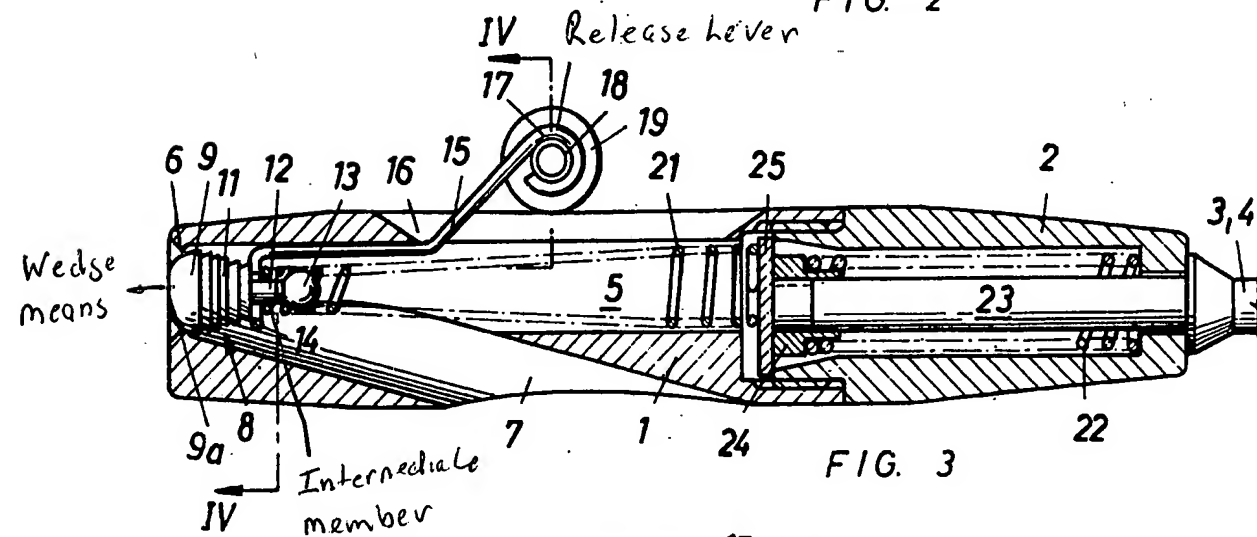


FIG. 3

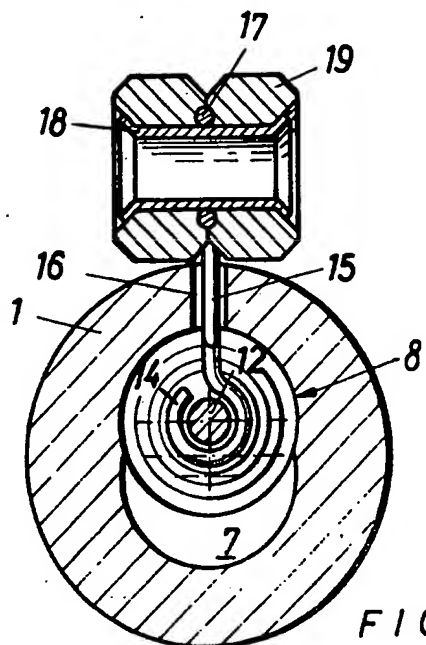


FIG. 4